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**NATIONAL
FORESTS
in
PROFILE**



**1966
YEARBOOK**

**INTERMOUNTAIN REGION
FOREST SERVICE
U.S. DEPARTMENT
OF AGRICULTURE
Ogden, Utah**



INTRODUCTION

U.S. DEPT. OF AGRICULTURE
NATIONAL FOREST SERVICE

JUL 14 1967

CURRENT SERIAL RECORDS

The Forest Service organization in the Intermountain Region recognizes that quality land management and quality environment go hand in hand — and that quality environment helps produce quality people. ■ Through the years our purpose has been to bring quality management to National Forest lands. Coordinating resource uses and activities on a longtime basis, with every operation benefiting every other operation whenever possible, has been our goal. ■ Today, as attention focuses even more sharply on new ways and means of improving the total environment of a growing America, we believe it is timely to point out some of the important accomplishments of the Department of Agriculture's Forest Service. ■ The following pages are designed to develop for you a quick overview of some of

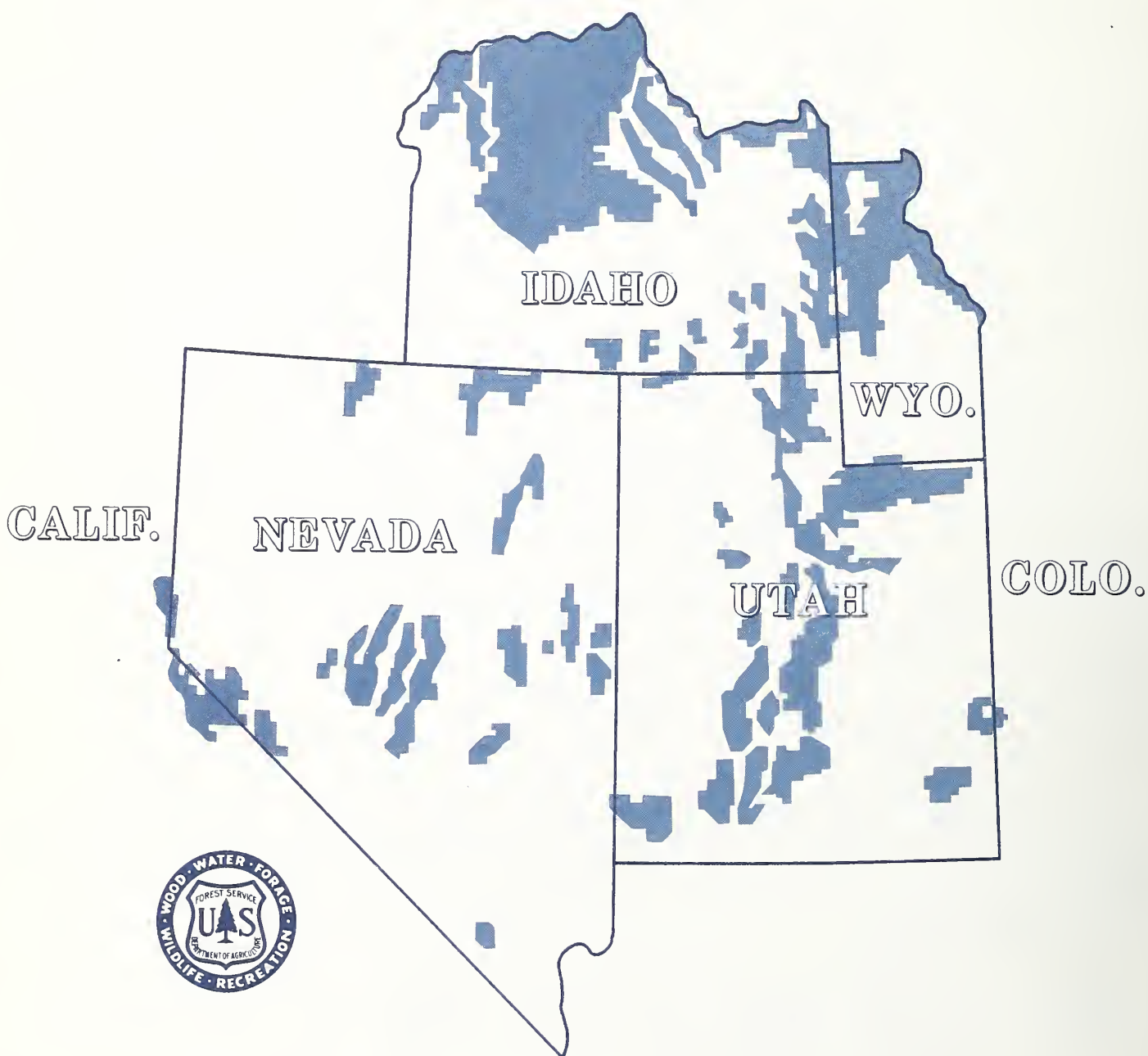
the creative action undertaken in 1966 by the administrative arm of the Forest Service — assisted by the Research organization and working with and through State Foresters in carrying out cooperative state and private forestry programs.

■ The natural beauty of our public lands must be cultivated. At the same time, a principal objective of National Forest management must continue to be: making a full contribution towards developing and supporting a strong economy within the framework of the free enterprise system.

Floyd Iverson

Regional Forester

The Intermountain Region **NATIONAL FORESTS**

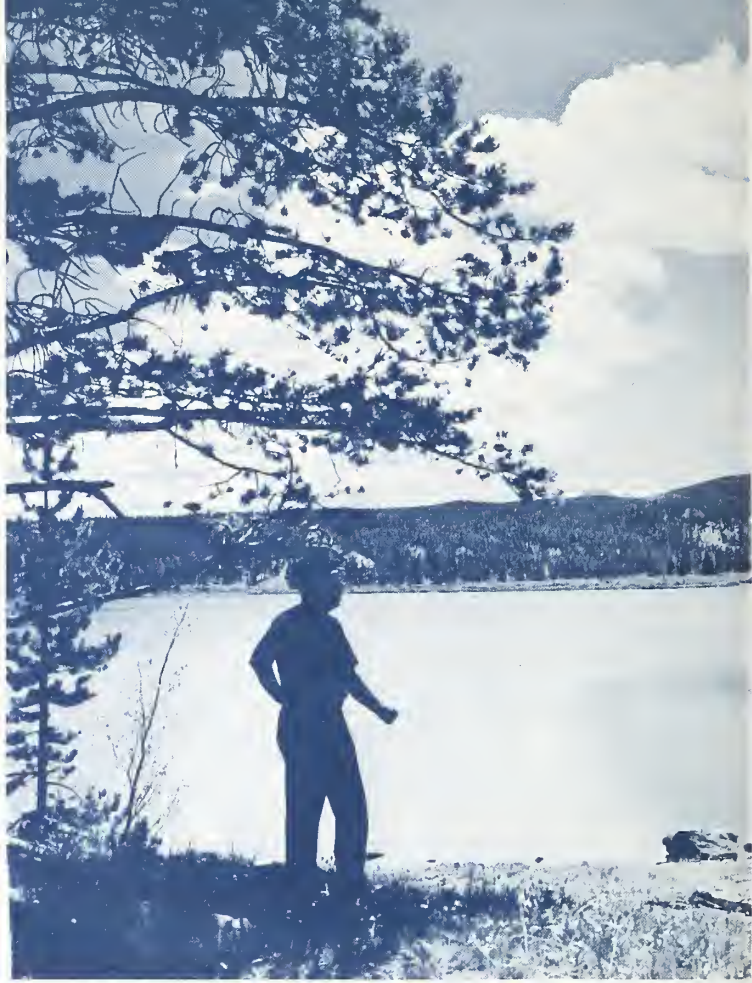


PLANNING



BEAUTY IN A MANAGED LANDSCAPE Beauty is found in properly managed land. Where resources are used and crops are harvested in cooperation with nature, land remains healthy and productive. ■ The famous Black Forest in Germany has been professionally managed for more

than six centuries. During those years it has produced wood, forage for wildlife, water, and recreation for generations of people. Yet it is known as one of the most beautiful forests in the world. ■ National Forests of the Intermountain Region have a shorter history of applied forest management. But each year they require more care to fill the needs of the American people. Under multiple use management they produce goods and services without impairing the basic resources. ■ Multiple use management also provides for the protection of wild land — wilderness and primitive areas where man may visit but may not remain. The Intermountain Region contains about 2.7 million acres of such land. It will remain wild and beautiful for future generations. Though value is unmeasured and unmeasurable, it will increase as our country grows more crowded. ■ Most National Forest land is used daily — by livestockmen, timber harvesters, water users, miners, and other commodity users. Gradually the overmature forests are being replaced by handsome young stands of trees. Livestock grazing on ranges reminds one of the Old West tradition that is so much a part of the Intermountain Region. ■ Forest Rangers look to the Intermountain Region Multiple Use Management Guide for direction in orderly use of National Forest land. This guide helps coordinate uses and recognizes esthetic values of the forest and rangeland. The Ranger District Multiple Use Plan is the on-the-ground tool that provides for a quality environment in a managed landscape.



SOIL, WATER, AIR



STUDYING WATER YIELDS Water measuring devices are at work on the Fishlake Forest in Utah. They are part of a study being made on National Forest lands to determine how changes in vegetative cover influence water production. ■ Spray projects based on research information have eliminated scrub oak and aspen on a 400-acre area. This thirsty vegetation is replaced by plants that use less water, such as grasses and forbs. Water measurements will continue as all resources are studied for effects of the treatment. ■ Eventually the study will help determine whether changing vegetative cover to increase water yield is sound multiple use management.

PURE AIR Just to breathe fresh air is often a wish of the city dweller. The Forest Service tries to make this possible by protecting the sea of air surrounding National Forests. Dust is a growing problem. It causes hazards on heavily used dirt roads and casts a deathly pallor over the landscape. It makes pavement an increasingly essential part of campground construction. Control barriers and seeding of disturbed soil helps combat dust. Also, controlled burning of slash is often delayed until after the season of the most public use.

FROM GULLIES TO GRASS Many gullied, flood-inviting watersheds of yesterday are now covered with carpets of grass. This return to a cared-for landscape did not happen overnight. The repair job began many years ago and gradually changed despair to hope and discord to cooperation. It continues today as Forest Service personnel work closely with communities and individual National Forest users to rehabilitate and protect valuable watersheds. The result is better water supplies, less water polluting sedimentation, and improved fish and wildlife habitat. A fine example of a managed watershed is found on the East Fork of the Sevier River in Utah. As a local resident of that area remarked,

"A few years ago we had to shovel a small dam to get enough water collected to water our horses in the creek during summer. Now we catch fish in this stream all season."

A MEASURE OF MOISTURE Winter's snow contains summer's water. Before the snow melts, the question of how much water there will be needs an answer. ■ During late winter months, Forest Service officers cooperating with Soil Conservation Service personnel traveled to nearly 300 remote measuring stations on National Forests of the Intermountain Region. Samples are taken for depth and moisture content of the snow. These samples, supplemented by aerial surveys, provide the basis for the summer's water forecast made by the Soil Conservation Service. Electronic devices are now being tested, but they have not yet replaced the arduous cross-snow trips to the mountains.

CENTRAL UTAH PROJECT The need for more water is being met in Utah by development of the Central Utah Project. This series of dams, diversions, and aqueducts will affect some of the National Forest resources. Proper evaluation is vital for the future management of the areas involved. ■ Most of the water for the Central Utah Project originates on National Forest lands. Water storage and transportation plans must consider the scenic, soil, and recreation values of the area and provide for their protection or enhancement. Range for livestock and habitat for big game and fish must be adequately considered. ■ Forest Service fisheries biologists, engineers, hydrologists, foresters, and other specialists are key members of a team including personnel from the Bureau of Reclamation and other interested agencies and groups. Members of this team are pooling their skills and experience to provide for the wide variety of National Forest needs, balanced with the downstream water benefits.





NATURE'S RECORDER Bristlecone pines, the world's oldest living trees, have recorded changing seasons of the Great Basin country in Nevada for nearly 5,000 years. Now they are revealing many secrets of the past to scientists from the University of Arizona's Tree Ring Laboratory who are making a bristlecone pine study under contract with the Forest Service. Specialists from the University of Nevada are studying the ecology of bristlecone pine. These studies will help tell how nature was balanced for the past several thousand years in this part of the country. They will provide information needed for protecting and managing these patriarchs of the forest. Studies will concentrate on the Humboldt National Forest in Nevada; but the ancient trees also survive in boulder fields of "high rise" mountain ranges in southern Utah and parts of California.

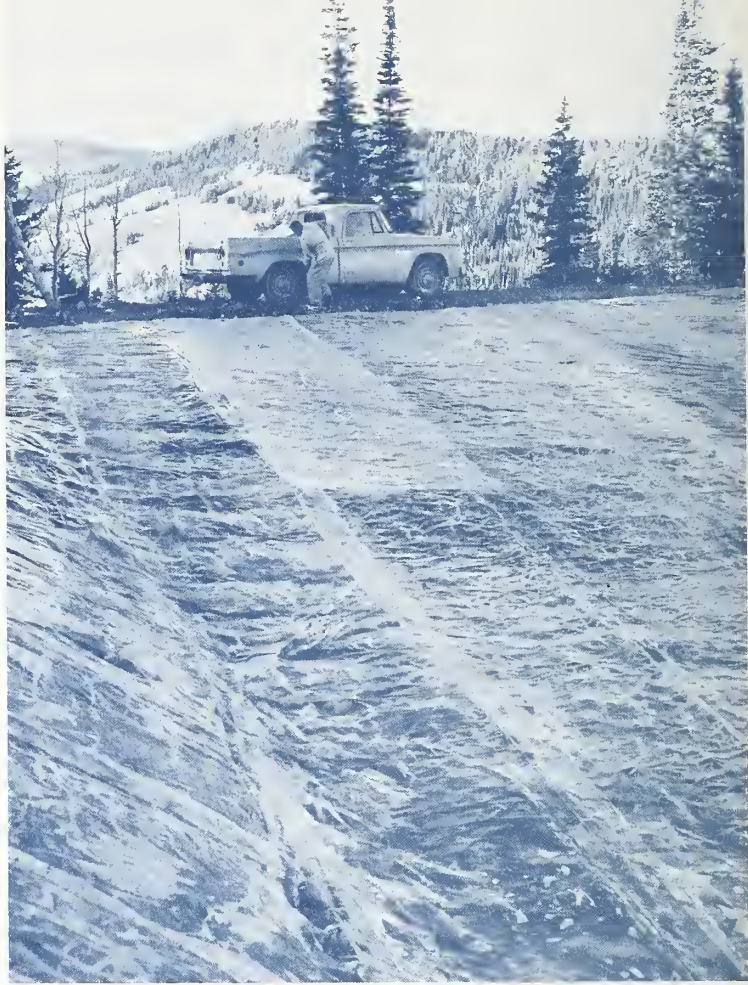
TREE PICKER A mechanical tree harvester that can limb, top, and cut a 75-foot tree in 30 seconds is working on the Targhee National Forest. This incredible metal monster is operated by one man who sits in a climate-controlled cab and directs the movements from a control panel. In less time than it takes to tell the story, the machine turns trees into logs and stacks them into neat piles, leaving the cut-over area with a minimum of disturbance. ■ Though it can harvest 600 trees in an 8-hour shift, the machine does not take the place of lumberjacks. It does not adapt to extremely rocky sites or heavy blow-down areas, and operation is limited to slopes of 20 percent or less. But there are many places on the Targhee where it works well. ■ This harvester will be especially valuable in the vast areas of lodgepole pine where old trees have fallen victim to bark beetles and are uneconomical to log. Where spray projects are now necessary to control the infestations, many trees may be salvaged with the help of the new machine.

PATCH CUTTING Change is constant in the timber production cycle. Overmature and defective trees must be cut so that young ones may grow straight and tall in a healthy forest. ■ Patch or clear cutting is a time-proven method of keeping the forest productive. Like the farmer tilling the land, the forester harvests the total timber crop, disposes of resulting slash, and prepares the site for new trees that will be the forest of the future. ■ In most of the Inter-

mountain Region, young evergreen trees grow better in open spaces where they have little competition. So the temporary, unattractive vacant spots in the forest left by clear cutting will soon be filled with vigorous, healthy trees. ■ The timber industry is a partner with the Forest Service in changing overmature forests to young healthy stands of timber. Foresters harvest many diseased and insect-infested trees that would otherwise be lost and bolster the economy of many communities.

LASER BEAM TRACKS SPRAY A ruby-red light beamed across the Salmon National Forest in the summer of 1966. It came from a laser machine being tested for the first time by Forest Service personnel and the Stanford Research Institute. This same light can perform many remarkable feats, such as cutting through metal, and is often used in delicate surgical operations. It can also detect particles of insecticide which are invisible to the eye. ■ The line of red light brought the Forest Service another step closer to better use of insecticides. Information gained in scientific experiments like this will help Forest Officers plan and conduct future bug control programs. A test project was also carried out on the Salmon National Forest using Zectran, a nonpersistent pesticide that shows promise of being safe and effective in the control of spruce budworm.

GREAT EXPECTATIONS A young pine planted this year at Grey Towers in Milford, Pennsylvania, is no ordinary tree. It comes from the first generation crop of super trees for the future grown at the Lucky Peak Nursery on the Boise National Forest in Idaho. These hardy youngsters, growing from seeds of "plus trees" chosen for desirable characteristics, are destined to do great things. The one chosen to grow at the Pinchot Institute for Conservation Studies in memory of Gifford Pinchot, first Chief of the Forest Service, has distinguished itself already by growing almost one foot per year since 1963. Other superior specimens in the group will be parents of tomorrow's trees. By selecting the best from each generation, tree scientists expect to increase tree quality by fifty percent in the near future. Sharing in these great expectations at the planting ceremony were Mrs. Amos Pinchot, wife of Gifford Pinchot's brother, and Forest Service Deputy Chief Clare Hendee.



FORAGE



THE PASTORAL SCENE Cattle and sheep are a common sight on National Forest rangelands in the Intermountain Region. They are an important part of the scenery and have been so since the days of the early West. Though the picture has had varied dimensions, livestock grazing continues today in a balanced blend of management for all resources. To many people the pastoral scene offers not only beauty but a deep sense of security. ■ Summer grazing supports the basic economy of more than 5,000 ranchers near the National Forests in this Region. Their 300,000 cattle and 1,100,000 sheep provide beef, mutton, and wool for the people of the nation. ■ The Basque shepherd is a colorful part of the mountain landscape where he tends his flocks. His teepee pitched on a knoll beckons the sheep to come for salt. Western tradition also lives anew at roundup time as the cattle move to new pastures and to market.

REST AND GROW Grass is greener now on many ranges of the Intermountain Region due in large part to a system of management known as rest-rotation. This system was developed by the Forest Service after years of research and experience with livestock grazing. It allows the range plants to rest for one full grazing season and until after the seed

matures the following year. ■ Each range unit under rest-rotation management receives enough nonuse to promote healthy plant growth. Prescriptions for 406 sheep allotments and 117 cattle allotments in the Region are worked out on the ground by Forest Rangers and livestock owners.

WATER FROM THE SKY Some areas of rangeland with high forage production cannot be grazed because of lack of natural streams or springs to supply water for livestock. In some situations a simple solution is provided by "rain-traps" — sheets of plastic material spread out on the ground to catch precipitation. The water is then stored in large plastic tanks or ground reservoirs until needed by grazing animals. Thus, livestock can graze the forage far from normal water supplies. ■ About 20 "raintraps" are now in use throughout the Region, adding many acres of rangeland that is suitable for livestock use.

MORE FEED Juniper removal followed by grass seeding is a proven practice for increasing forage and improving watershed conditions. Scattered juniper trees are left by design to enhance the scenic view. Both wildlife and domestic livestock use the trees for shade and cover.



WILDLIFE



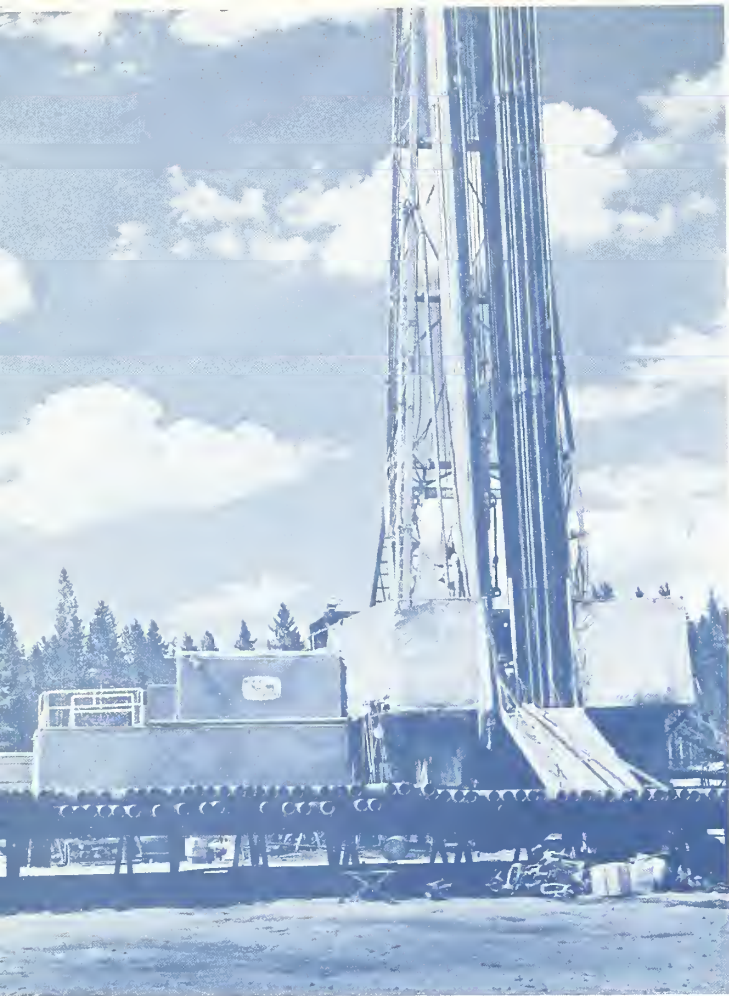
WILDLIFE IN THE FOREST Whether in the depths of wooded glades or along the fringe of a forest as it gives way to open land, wild animals and birds are part of the forest community. A variety of fish in mountain lakes and streams complements the pattern of wild beauty. As timber is managed for useful wood products, care must be given to wildlife resources and their habitat. ■ For those who wish to see wild creatures in their natural environment, the National Forests hold many opportunities. The high-nesting osprey — like the eagle — builds a penthouse home on top of a dead snag or rock. The rare trumpeter swan makes its summer home on National Forests in Idaho and Wyoming. To protect the nesting of these beautiful birds, multiple use management provides for alteration or modification of other uses.

TRACKING THE SAGE GROUSE Generally, more is known about big game species than about birds. Using electronic “bugs” and other techniques, State Fish and Game personnel study migration patterns of the sage grouse. Where the birds go during the year is important, since the sagebrush plant is essential for both their diet and cover. Meadow forbs provide food for young in the summer. Control of plants on productive grazing lands must be carefully coordinated. As a result of cooperation between Nevada

State wildlife biologists and the Forest Service, many ridges and swales were not sprayed in the Stoneberger Basin in Nevada. This type of management provides increased forage for livestock while maintaining habitat for game birds.

FOR HEALTHY DEER & ELK Techniques to improve browse conditions for big game animals are jointly applied by State and Forest Service biologists. Many browse ranges have been overused by deer and elk; this has resulted in deterioration of watershed and scenic values. Rehabilitation of these areas has been stepped up by the production of over a quarter million bitterbrush seedlings from the Lucky Peak Nursery near Boise for planting in key browse areas.

FISH FENCES Fences protect the banks of many streams in the Region. They may get in the way of wandering fishermen, but they also get in the way of livestock that would trample the grass-covered streambanks. Fences in the right places result in more productive fishing streams with deep holes shaded by streambank vegetation. ■ Occasional gaps in the fence allow livestock access to watering places. A simple rustic fence used in this way becomes an excellent tool in managing the land to protect natural beauty while using the multiple resources.





RECREATION & SPECIAL LAND USE

BLACK GOLD FROM THE FOREST Oil is flowing from several commercial wells in the Intermountain Region. Some are on picturesque timberlands. On the north slopes of the Uinta Mountains on the Wasatch National Forest, the first three of a series were successfully brought in by the Phillips Petroleum Company. Exploratory wells are being drilled on other sites. ■ It is not easy to blend oil wells with the forest landscape, but the petroleum industry is working with the Forest Service to achieve this. There is much that can be done. Some drilling locations have been changed to preserve the natural forest setting. Oil production sites are carefully cleaned up following drilling operations, and grasses and other cover are planted.

PERSONALIZED RECREATION Campgrounds are designed for people seeking recreation, and the recreation they seek is as varied as the people. With this in mind the Forest Service works to meet the needs of recreationists now and in the future. ■ Can the special qualities of the landscape endure with man as a close neighbor? This is the question asked by each National Forest manager as he considers the impact of recreation sites. The answer lies in establishing harmony in the environment. ■ Harmony is created between campgrounds and their surroundings when each site is tailored to its location. In heavily used areas where people desire quick access to boat ramps and fishing, campsites are often grouped close together to accommodate as many as possible. In some places, modern facilities are part of the pattern. And on crowded holidays, overflow areas provide extra space for visitors. ■ Back country travelers find minimum facilities adequate for their needs, as do boat travelers who seek camping experience in remote country accessible only by water. Recreation planners have a big job to do in providing adequate facilities while protecting scenic values and other resources.

LAND ABOVE THE ORDINARY Management of the Sawtooth country — a land of uncommon features — is a matter of interest to people throughout the country. Recently this fragile and scenic land was in the nation's spotlight during a hearing conducted by the Senate Subcommittee on Parks and Recreation. The hearing was held to deter-

mine whether a National Recreation Area or a National Park would best serve the needs of the 572,000-acre area surrounding the Sawtooth Mountain Range. Background information was provided by an earlier joint study made by the National Park Service and the Forest Service. This study found that some 351,000 acres, including about 195,000 in the present primitive and proposed wilderness area, offer exceptional recreation and scenic values. It also points out the need for careful management, accelerated development outside the wilderness, and more recognition for the area. ■ Final decisions on management responsibilities of the Sawtooth country rests with Congress. In the interim the Forest Service continues to plan and carry forward an effective management program for the various resources of Sawtooth country.

NEW TRACKS IN THE SNOW Mountain stillness locked tight in winter white is no longer the private domain of a few furry animals and hardy cross-country skiers. Now running parallel with the imprints of the marten and the snowshoe rabbit are the tracks of various kinds of over-snow vehicles. Areas which took several days to reach on snowshoes can be reached by these machines in a few short hours. Many will be able to enjoy the strange stillness of the snow-covered forests and follow those roads in winter that lead to picnics in the summer.

PRESERVING THE PAST An authentic glimpse into the past will soon be enjoyed by visitors at the old mining town of Custer on the Yankee Fork of the Salmon River. Founded in 1878, the town boasted a population of 3,500 people in 1881, and by 1904 nearly 12 million dollars in gold had been mined in the surrounding area. The old schoolhouse-building museum containing hundreds of historical items was purchased in 1966 by the Challis National Forest from Mr. Arthur McGowen — a resident of Custer for nearly 70 years. ■ At the Custer Historical Site, plans include restoring old buildings as nearly as possible to their original state. A trail will take people safely inside an existing mine tunnel. Historical items will be properly displayed and an interesting interpretive program will be developed around the mining history of Yankee Fork.



FIGHTING FIRES



A YEAR OF GREAT LOSS Fire burning conditions reached a long-time high as warm spring days gave way to hot, dry summer days. A series of lightning storms in Idaho and Nevada sparked dehydrated vegetation on rangelands and forests. Of the 1,328 fires in the Region, nearly 1,000 were caused by lightning. ■ Public support was gained by distribution of Smokey Bear fire prevention material and through the help of radio, TV, and newspapers. ■ Big fires taxed the equipment and manpower of federal, state, and private firefighting organizations. Military-like mobilization techniques were required of all agencies concerned. ■ One of the most severe battles raged at Garden Valley in southwestern Idaho. Four project fires started in one afternoon, spreading on Boise National Forest lands as well as state and private lands. The Charter Mountain Fire was fanned by dry winds across entire drainages. An army of 1,500 men, including organized Indian and "hot shot" crews from all over the West, worked the many miles of fire lines. ■ The scene was repeated in Nevada on the Humboldt National Forest. Then, in late September, lightning struck again in Idaho on the Payette National Forest. More than 160 fire starts were reported within the next few days; seven required large firefighting organizations at once. ■ By the end of the 1966 fire season, 64,000 valuable acres in the Intermountain Region had been seared: a great loss in resources and scenic beauty. More than half of these acres burned as the result of fires burning onto the National Forests from adjoining lands.

REESTABLISHING THE ENVIRONMENT Almost before the ground had cooled, Forest Service watershed specialists were making plans to restore health to the burned land. Seed drills sprinkled seeds of soil-holding grasses on many steep watersheds, and bitterbrush seedlings raised in the Lucky Peak Nursery will be planted in the spring on critical winter game range damaged by fire. ■ Each planting is aimed at restoring land to its original state of productiveness and attractiveness as quickly as possible. Native plants, often those most useful to the large deer and elk herds, will be used in the Idaho Primitive Area.

LONG-NOSED FOREST FRIEND Designed specifically for back country flying, the amazing jet-prop Fairchild-Hiller

aircraft can take off within 120 feet and climb at a 45-degree angle through narrow canyons. The "bird-dog nose" Turbo-Porter is the most important advance in mountain flying since the helicopter. ■ The plane can carry four smokejumpers and their gear and drop them very efficiently. The slow drop speed of the aircraft allows safe spotting of three jumpers in the same time it normally took to drop one jumper. During the first season of use, this contracted aircraft, with its square features and long nose, earned a top place on the Forest Service firefighting team.

SLOWING DOWN FIRES Magic ways to protect the forest from fire have not yet been developed. But foresters are studying several techniques in slowing down fires. Each year they gain new information from cooperative programs between the Intermountain Forest and Range Experiment Station and regional fire control people. ■ One method that promises to slow fire speeds is replacing highly combustible plants and brush with slow-burning native grasses and forbs. Eventually, National Forest managers hope to create a continuous fuel break between heavily used recreation areas or suburban developments and the nearby forests or brushlands. Such a fuel break may provide a natural location to build fire lines and more easily control the oncoming fire.

THE SEEING EYE FOR FIREFIGHTERS Mapping a smoke-shrouded, wind-driven fire is tricky business even in daytime, but at night it becomes nearly impossible. Thanks to a breakthrough developed by the military service, an airplane-mounted infrared scanner was used on major fires during 1966. Some of the processes used are classified as "secret." ■ The scanner senses heat sources day or night regardless of smoke condition. Polaroid pictures are taken of the scanner's cathode tube (much like a TV tube). Hot fire leads, cold fire lines, roads, and spot fires can be recognized and transferred to aerial photos. ■ The equipment was developed at the Forest Service fire laboratory at Missoula in cooperation with the Department of Defense. The fire scanner team operates throughout the West from their base at Boise, Idaho.



ENGINEERING SERVICES

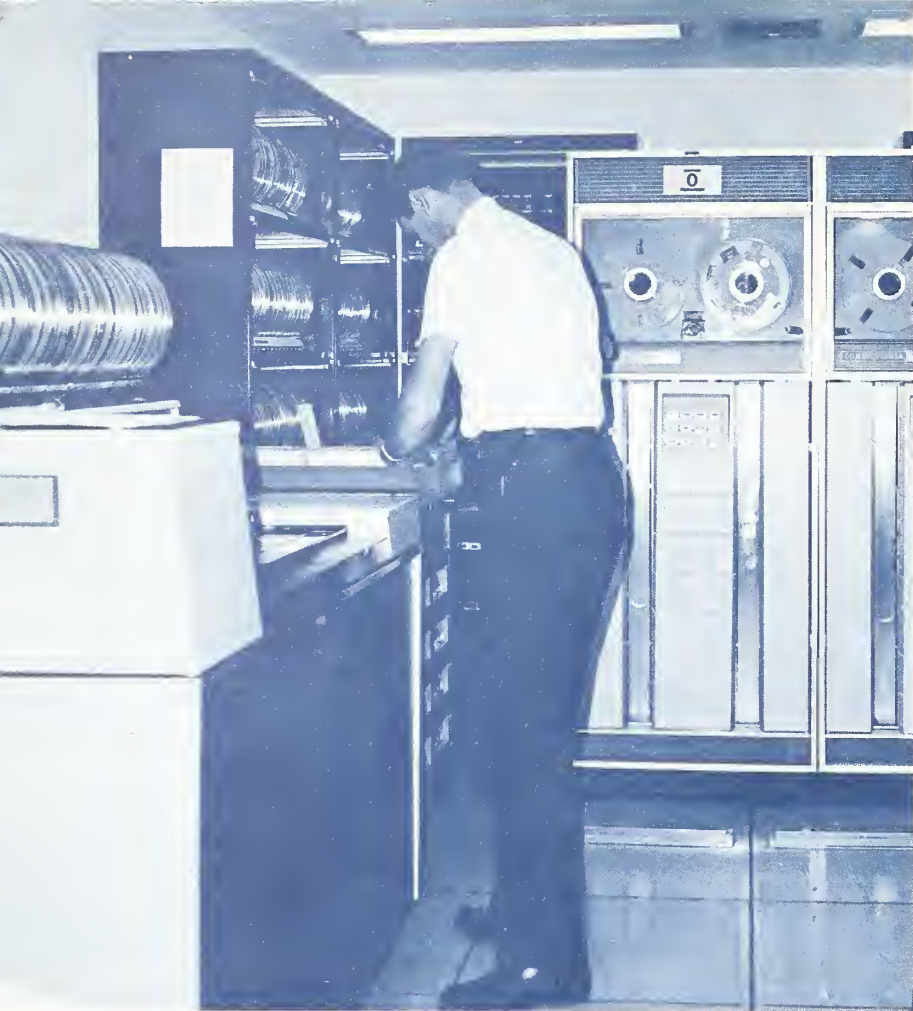


MICRO-MEASUREMENTS Everyone knows that frequency modulation makes music sound better. It also does remarkable things for forest engineers who plan roads. From music to roads is a long way, but some of the same principles apply. The microwave distance-measuring instrument uses frequency modulation to accurately and instantly determine distances. This method replaces the steel tape and surveyor's chain used in ground or aerial photo surveys. ■ Prior surveying alone does not guarantee proper road location. Forest engineers are not necessarily looking for the shortest way through the country but at the overall picture of how roads can blend with terrain, soils, water, and vegetation. Roads through National Forests may wind through mountainous countryside, skirt the edge of a meadow or natural opening, and avoid a potential recreation area. For example, the trumpeter swan is considered when a road is planned; nesting areas are always treated with respect. ■ Combining this information with modern engineering techniques like the microwave distance-measuring device becomes an exercise in multiple use management. The results are useful roads that fit into the natural beauty of the Forest landscape.

CUT-BANK COVER Ugly scars on mountainsides are the price often paid for modern roads. Roadbank cuts usually resist efforts to cover them. Wind and water erode the

soil and make it difficult for plants to grow there. ■ When man alters the landscape, he anticipates the reaction of nature's laws. The Forest Service is using several methods to restore stability to roadbank cuts. Terraces are often used, and a hydro-seeder spraying a combination of grass seed and mulch is a big boost to restoring beauty to the bare soil. When plants grow too profusely, a rotary mower trims, but does not destroy, the protective cover.

TRAILWAYS Following trails is part of the fun for National Forest visitors. For a trail is an invitation to adventure — an invitation to leave cares behind and enjoy the freedom of the forest world. ■ A good trail must belong to the landscape, but it must do so with a minimum of disturbance to the resources. This requires careful planning and construction. ■ In the Intermountain Region an effort is being made to update and expand forest trails. Much of the 23,000-mile trail system needs to be relocated or improved, and in wilderness areas work must be performed without motorized equipment. ■ Throughout the Region, visitors will be given opportunities to follow the trail of history as many pioneer routes are reestablished and preserved. And near metropolitan areas, new trail systems like the one being constructed along the Wasatch Front will lead people away from the city and into the forest.



NEW PROGRAMS



PROGRAMMED EFFICIENCY Remarkable deeds are done by the new high-speed 3100 Data Control Computer. It can provide answers in minutes to problems that would require countless hours of work by several specialists. Operating two shifts a day, the computer makes speedy work of road designs, timber inventories, recreation use reports, range analysis data, and mountains of fiscal and budget reports. It is used by the Intermountain Forest and Range Experiment Station in many research projects. ■ The machine could do none of these things without a competent staff to provide the brain power. And the work would have no value without land managers who know what they need from the computer. But with all things working together—the computer is making a great contribution to forestry research and efficient, effective land management in the Intermountain Region.

PROTECTION THROUGH LAW ENFORCEMENT Mountain air and scenery usually inspire people to conserve and care for National Forests. But because a few have no respect for the laws of nature, rules and regulations must be enforced for the good of all. ■ One of the Region's two law enforcement officers recently graduated from the FBI Academy. His training included work in the Bureau's Soil and Metal Laboratory. These specially trained men will assist Forest Service personnel in preventing and investigating vandalism and trespass on National Forest lands. With this help the Forest Ranger will be able to take action to prevent damage and destruction of scenic beauty and other resources.

CONSERVING HUMAN AND NATURAL RESOURCES Young men in the Job Corps learn many things at the Clear Creek Conservation Camp on the Toiyabe National Forest.

They learn the importance of conserving natural resources, and they learn how to do it. Even more important, they learn that people are the country's most valued resource. Their education is balanced with productive work that includes many conservation projects. National Forest recreation facilities were constructed at Nevada Beach on Lake Tahoe. Many of these young men worked as an organized fire crew on several large fires during the past fire season. Their most unusual project was the construction of a protective shelter at the Ichthyosaur State Park to house the fossils of several different prehistoric mammals. The building will serve as a museum for visitors to the area.

A NEW APPROACH Planning-Programming-Budgeting System is a new approach to an old problem — how to invest dollars for the best return. This year the Forest Service was one of the agencies selected to extend the procedures originated in the Defense Department into a land management program. Using PPBS, land managers define specific goals and then decide how to program a budget to achieve them in the most effective and efficient way. They have been doing this for a long time, but the new emphasis is on systematic, objective analyses that measure program outputs and then develop meaningful comparisons of alternatives. ■ Some management decisions do not readily lend themselves to measurement of output. For instance, the intangibles of a scenic landscape, habitat for an endangered species of wildlife, or a place of complete quiet is difficult to measure in dollars. But the Forest Service is making progress in adapting PPBS to land management, and the effort is paying off in stronger forestry programs. Among our first activities was a partial evaluation of the Region's timber programs and a special study for the North Slope of the Uintas on the Ashley and Wasatch National Forests.



INFORMING PEOPLE



IN THE PUBLIC INTEREST Mrs. Esther Peterson, special advisor to President Johnson, and Mrs. Margaret Hasebroock, president of the General Federation of Women's Clubs, are interested in natural resource management. The 1965 yearbook, which they are reading, is one of the informative publications prepared last year in the Intermountain Region. Pamphlets, maps, and brochures are produced to answer requests from the public for information on conservation and places to see on the 18 National Forests of the Intermountain Region.

PRODUCTIVE GIRLPOWER This year teenage girlpower organized to help build a trail into 50 million cubic yards of wildly displaced rock, earth, and trees. Why? So visitors to the great Gros Ventre landslide might be able to have an unusual recreation experience on a personal basis. In July enthusiastic young women rendezvoused in the specially classified Gros Ventre Slide Geological Area on the Teton National Forest to involve themselves in a conservation education service project. From 17 different states across the Nation they came. The idea developed at the first National Young Women's Christian Association Conference on Outdoor Recreation and Conservation in Jackson Hole, Wyoming, in 1964. The National Y-Teen Pilot Work Camp this year provided "action" followthrough. Every morning for two weeks girls cleared and leveled and filled and surfaced. And they opened the trail for the second National YWCA Conference on Outdoor Recreation and Conservation in Jackson Hole, Wyoming, 1966.

INTERPRETING OUR HERITAGE The past joins the present and the present becomes part of the future at visitor

information centers in the Intermountain Region. There are three major centers now operating, where exhibits tell the story of National Forests and surrounding geological areas. One center is located at Redfish Lake on the Sawtooth National Forest; one perches on a cliff at Red Canyon Overlook above Flaming Gorge Reservoir on the Ashley National Forest; and the other, also located near Flaming Gorge, is managed jointly by the Bureau of Reclamation, National Park Service, and Forest Service. This year, mobile trailer visitor centers were introduced as part of the Region's interpretive program. The first mobile center, stationed at Lost Trail Pass on the Salmon National Forest, is a joint project with the Forest Service's Northern Region.

LANDS FOR LEARNING Natural resources moved into the classrooms of many schools in Utah this year as a result of the Outdoor Conservation Education Workshop for Utah teachers held at the Great Basin Experiment Station in Ephraim Canyon on the Manti-LaSal National Forest. The Intermountain Forest and Range Experiment Station and the Utah State Department of Public Instruction joined forces with the Intermountain Region to present the workshop. It enabled 120 teachers to learn first-hand how to integrate conservation concepts into the regular curriculum and how to use the out-of-doors as a school laboratory. ■ In another project, increased conservation education activities for the future were assured by the beginning of construction on the Mill Hollow Center for Utah's Granite School District on the Uinta National Forest. First of its kind in the Intermountain Region, the center will provide living facilities for 200 students. It will be headquarters for specialized year-round outdoor instruction that cannot be duplicated in regular classrooms.



PERSONNEL MANAGEMENT



OUR PEOPLE People in the Forest Service work as a team. Professional foresters, trained in managing land and conserving resources, are the backbone of the organization. Their specialty may be in the management of timber, range, recreation, water, or wildlife. They strive for balance in making land management decisions by using the best information from each specialized field. ■ Skills in professions outside of forestry are also used in managing National Forests. Landscape architects design camp and picnic grounds; engineers plan roads and trails; soils specialists prevent erosion; entomologists and pathologists fight the war against insects and disease; and specialists in visitor information services tell the story of the land and explain the work of the Forest Service. Field personnel provide the muscle for fighting fires, building and maintaining trails, and keeping up campgrounds. Business management specialists and efficient clerical forces keep "all systems go" throughout the Forest Service.

PEOPLE FOR THE FUTURE The key to the future is people — people who are trained in managing land and conserving resources. As population increases, the Forest Service will need more technical and scientific information. Land managers will continue to need the skills of geologists, mining engineers, hydrologists, historians and archaeologists. The Forest Service will need men and women with broad education and imagination, and it will need people who are concerned with the problems of others.

MEETING TOMORROW'S CHALLENGE Summer-time is job time for many college students, and today's summer employee may be tomorrow's Forest Officer. Personnel experts working with college officials channel part-time workers into their specialized fields wherever possible in order to add to their training. ■ College student employees often assist their professional counterparts. A student of landscape architecture works on the layout of a new National Forest campsite; an engineering student may

help design and construct roads and trails; and a student in range management gains valuable experience by working with on-the-ground range problems. In the Intermountain Region more than 350 students worked in a variety of jobs in this program during 1966. ■ The Forest Service also participates in several other employment programs. Under the President's Youth Opportunity Program, 40 young students were employed in routine helper-type jobs. Occasionally, individuals working in this program are able to obtain regular Forest Service assignments. The adjoining picture shows a student who is now a regular part-time drafting aid in the Division of Engineering.

PUBLIC AND PERSONNEL SAFETY The safety of National Forest visitors as well as the safety of Forest Service people is the concern of each Forest Officer. Recognizing and removing hazards in heavily-used areas such as campgrounds is an important part of this job. Protecting Forest Service people and the public from accidents means proper safety equipment and intensive safety training. In 1966 added emphasis was given to both public and employee safety programs by a newly assigned Regional Safety Officer.

FORESTERS FROM AFAR Foresters from five foreign countries visited the Intermountain Region during the summer. Typical of this group is Mr. K. M. Shams from Pakistan, one of the 26 foresters to take advantage of the AID (Agency for International Development) program sponsored by the State Department. ■ His goal was to learn from our forest officers more about management of rangelands. With this information he hopes to improve range management in his homeland. ■ Professional foresters from Turkey, Nepal, and Uganda also visited the Region this summer. In another cooperative program, six Nigerian students of forestry received on-the-job training at various Forests of the Region. They have since returned to American universities to continue their studies of forestry.

COOPERATIVE PROGRAMS



NEW SKILLS THROUGH RURAL AREAS DEVELOPMENT

When harvest of lodgepole pine in eastern Idaho slowed because of a lack of skilled timber fallers, supplies of logs for local mills dwindled rapidly. To meet the problem, the Teton County Rural Area Development Committee worked with the Forest Service to organize an on-the-job training session for timber fallers. This training was authorized under the Manpower Development Training Act and was financed through the Department of Labor and the Idaho State Land Board. The Targhee National Forest became a classroom for 17 trainees. While being taught by skilled power saw operators, they cleared a road right-of-way to a proposed winter sports area. The school produced a number of skilled timber fallers available to work on other logging projects important to the local economy.



SAVING TAHOE'S TREES Forest pests care not whose trees they destroy. In the Tahoe Basin area in Nevada, insects and diseases have invaded National Forests, private land, and state-owned land. A team of entomologists and pathologists from State Forestry offices in California and Nevada and Forest Service officials from both states are attempting to save healthy trees in this scenic recreational area. To do this they are identifying special activities and factors which have contributed to the loss of trees. By making this information available to local government planners and developers, they hope to decrease future losses and maintain an attractive managed landscape in the Tahoe Basin.



A QUALITY LANDSCAPE Planting trees has long been the business of foresters — on state and private as well as federal lands. This year the Intermountain Region cooperated with the State Foresters of Utah and Nevada to involve the 8,500 young women of the Utah Girl Scout Council in conservation decision-making. In their "Trees for Beauty" Arbor Day projects, the girls planted trees where the girls thought trees were needed. Then they promised to care for them, to become acquainted with them, and to introduce them to others — making the plantings an ongoing program. Local citizens who were qualified consultants helped to select the sites. They recommended schoolyards and public properties. This cooperative conservation education project helped create more than five hundred outdoor laboratories across Utah and eastern Nevada.

1966

**U.S. FOREST SERVICE
INTERMOUNTAIN REGION
ORGANIZATION**

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Page 24	Tahoe's Trees. Nevada Forestry Department

“The Forest Service of the U.S.
Department of Agriculture is
dedicated to the principle of
multiple use management of the
Nation’s forest resources for
sustained yields of wood, water,
forage, wildlife, and recreation.
Through forestry research, coop-
eration with the States and private
forest owners, and management of
the National Forests and National
Grasslands, it strives — as directed
by Congress — to provide
increasingly greater service to a
growing Nation.”

Orville L. Freeman, Secretary of Agriculture
Edward P. Cliff, Chief, Forest Service